CLAIMS

WHAT IS CLAIMED IS:

1.   A method of pipelining a disease-specific diagnostic algorithm on an n-bit data word stored in a memory, said method comprising:

  a) defining clinical tests used for the diagnosis of a disease;

  b) defining each of the clinical tests on the n-bit data word and providing the normal value of each clinical test;

  c) sequentially reading out each of said clinical test normal values of the n-bit data word from said memory;

  d) upon receiving a first of said clinical test value, computing the next clinical test;

  e) receiving a next one of said clinical tests of said data word;

  f) computing a next portion of the diagnostic algorithm using said next of said clinical tests and a most recently calculated value of a computation of a prior portion of the diagnostic algorithm to produce a second clinical test value; and

  g) if necessary, repeating steps (e) and (f) until all of said clinical tests of the data word have been processed, wherein the final value computed for the last clinical test is a value for the complete diagnosis of the specific disease.

2.   The method of claim 1, further comprising performing a different clinical test after the value for the last clinical test is negative, to rule out a different diagnosis.

3.   The method of claim 1, further comprising using a program code to implement the diagnostic algorithm.

4.   The method of claim 3, further comprising using a modified computer architecture code to implement the diagnostic algorithm.

5.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the acid fast bacteria algorithm.

6.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the anemia algorithm.

7.   The method of claim 1, wherein the disease-specific diagnostic algorithm

8.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the HBsAg algorithm.

9.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the breast cancer algorithm.

10.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the prostate cancer algorithm.

11.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the Epstein-Barr virus algorithm.

12.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the Hepatitis algorithm.

13.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the thyroid function algorithm.

14.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the autoimmune algorithm.

15.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the serum protein algorithm.

16.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the urinalysis.

17.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the human immunodeficiency virus.

18.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the hepatitis B algorithm.

19.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the syphilis algorithm.

20.   The method of claim 1, wherein the disease-specific diagnostic algorithm comprises the thrombophilia algorithm.

21.   An apparatus for pipelining a diagnostic algorithm on an n-bit data word, said apparatus comprising:

a)   a memory storing the n-bit data words;

b)   means for sequentially reading out each of a m clinical tests of the n-bit data from said memory, wherein m is an integer greater than one;

c)   m clinical tests, each of which is programmed to compute a different clinical test of the diagnostic algorithm using a different one of the m clinical tests to produce a corresponding result, wherein each of said clinical test after a first test receives the result from a prior stage and wherein the result from a prior stage and wherein the result from a last one of said m clinical tests is a complete diagnosis of a disease obtained by the no-bit data word.

22.   The apparatus of claim 21, wherein the m clinical tests have an equal number of bits.

23.   The apparatus of claim 21, wherein the memory comprises an array of chips, each of which includes a plurality of m-bit storage cells.

24.   The apparatus of claim 23, wherein m equals at least one.